Notice of Allowability	Application No.	Applicant(s)	
	09/851,234	BIALK ET AL.	
	Examiner	Art Unit	
	Tam (Jenny) Phan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *1/24/2005*.

2. ☒ The allowed claim(s) is/are *1,6-8,11,12,15,20,21 and 25*.

3. ☒ The drawings filed on *5/8/2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 9/15/04, 12/20/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *04/12/2005* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

WILLIAM A. CUCHLINSKI, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. This application has been examined. Amendment received on 01/24/2005 has been entered. Claims 1, 4, 11, 15, 18, and 25 are currently amended. Claims 2-3, 9-10, 13-14, 16-17, and 23-34 are cancelled.

2. Claims 1, 4, 5-8, 11-12, 15, 18-22, and 25 are presented for examination.

Priority

3. No priority claims have been made.

4. The effective filing date for the subject matter defined in the pending claims in this application is 05/08/2001.

Information Disclosure Statement

5. An initialed and dated copy of Applicant's IDS form 1449, Received on 9/15/2004 (15 September 2004), 12/20/2004 (20 December 2004), is attached to the instant Office action.

Terminal Disclaimer

6. The terminal disclaimer filed on 01/24/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 09/850,910 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Examiner's Amendment

7. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

8. Authorization for this examiner's amendment was given in a telephone interview with Mr. James N. Kallis (Registration No. 41,102) on 01/11/2005.

9. The application has been amended as follows ([[ ]] denotes deleted item):

Claim 1. (Currently Amended) A broadband network comprising:

a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of subscribers;

wherein the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals;

wherein the network elements further include a fiber optics node connected at one end to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at the other end to the customer-premises equipment by coax;

an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment;

a service, design, and inventory (SDI) database operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, for storing data indicative of assigned capacity of the network elements, and for storing data indicative of physical and logical connections between the HFC network and the customer-premises equipment of f the subscribers; [[and]]

an online provisioning application link (OPAL) operable with the HFC network manager and the database for automatically provisioning network elements with the customer-premises equipment of the subscribers based on the assigned capacity of the network elements such that the network elements and the customer premises

equipment are logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the subscribers[[.]] ;

a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscribers; and

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

Claims 4-5. (Cancelled)

Claim 6. (Currently Amended) The broadband network of claim [[5]] 1 wherein: the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

Claim 7. (Currently Amended) The broadband network of claim [[4]] 1 further comprising: a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one of the network elements and the customer-premises equipment.

Claim 15. (Currently Amended) In a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for communicating telephony, data, and video signals with customer-premises equipment, a network management system for managing the HFC network, the HFC network management system comprising:

an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and

the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment;

wherein the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals;

wherein the network elements further include a fiber optics node connected at one end to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at the other end to the customer-premises equipment by coax;

a service, design, and inventory (SDI) database operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, for storing data indicative of assigned capacity of the network elements, and for storing data indicative of physical and logical connections between the HFC network and the customer-premises equipment of f the subscribers; [[and]]

an online provisioning application link (OPAL) operable with the HFC network manager and the database for automatically provisioning network elements with the customer-premises equipment of the subscribers based on the assigned capacity of the network elements such that the network elements and the customer premises equipment are logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the subscribers[[.]] ;

a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscribers; and

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

Claims 18-19. (Cancelled)

Claim 20. (Currently Amended) The HFC network management system of claim [[19]] 15 wherein: the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

Claim 21. (Currently Amended) The HFC network management system of claim [[18]] 15 further comprising: a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one of the network elements and the customer-premises equipment.

Reasons for Allowance

10. Claims 1, 6-8, 11-12, 15, 20-22, and 25 are allowed.

11. The claimed invention involves a broadband network comprising: a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of subscribers; wherein the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals; wherein the network elements further include a fiber optics node connected at one end to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at the other end to the customer-premises equipment by coax; an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment; a service, design, and inventory (SDI) database

operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, for storing data indicative of assigned capacity of the network elements, and for storing data indicative of physical and logical connections between the HFC network and the customer-premises equipment of f the subscribers; an online provisioning application link (OPAL) operable with the HFC network manager and the database for automatically provisioning network elements with the customer-premises equipment of the subscribers based on the assigned capacity of the network elements such that the network elements and the customer premises equipment are logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the subscribers; a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscribers; and a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

12. The following is an examiner's statement of reasons for allowance: the limitation of an online provisioning application link (OPAL) operable with the hybrid fiber coax (HFC) network manager and the service, design, and inventory (SDI) database for automatically provisioning network elements with the customer-premises equipment of the subscribers based on the assigned capacity of the network elements such that the network elements and the customer premises equipment are logically connected in

order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the subscribers; and a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment (defined in the present specification per Page 9 lines 14-24, Page 10 lines 18-30, Page 11 lines 3-10, Page 14 lines 13-20, and Page 20 line 11-Page 21 line 24; and per Figures 3 and 8) was not taught or suggested by the prior art of record *in combination with the other limitations of the independent claims.*

13. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

14. Applicant's arguments, filed 01/24/2005, with respect to the pending claims have been fully considered and are persuasive. The rejection regarding the pending claims has been withdrawn.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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tp
April 12, 2005